



SoftServe + NVIDIA

Power & Utilities

SoftServe's AI-Powered Utility Intelligence Framework, Powered by NVIDIA

*The intelligence layer above the grid.
Built on Grid Operations. Not a Lab.*

10

Solution
Domains

187

Validated
Use Cases

22

Operating
Domains

**Utilities don't buy people who know AI.
They buy people who know the grid.**

Executive Presentation · June 2026

Five Forces Driving Utility AI Adoption: All Accelerating Now.

01 Data Center Load Wave

The largest load growth since electrification. Utilities that answer interconnection feasibility in weeks sign the gigawatts. Those that take months lose the investment.

02 Aging Workforce & Infrastructure

Half the experienced operators retire this decade — forty years of operating knowledge walks out every Friday. At the same time, aging infrastructure raises failure risk and maintenance cost.

03 Extreme Weather Mandates

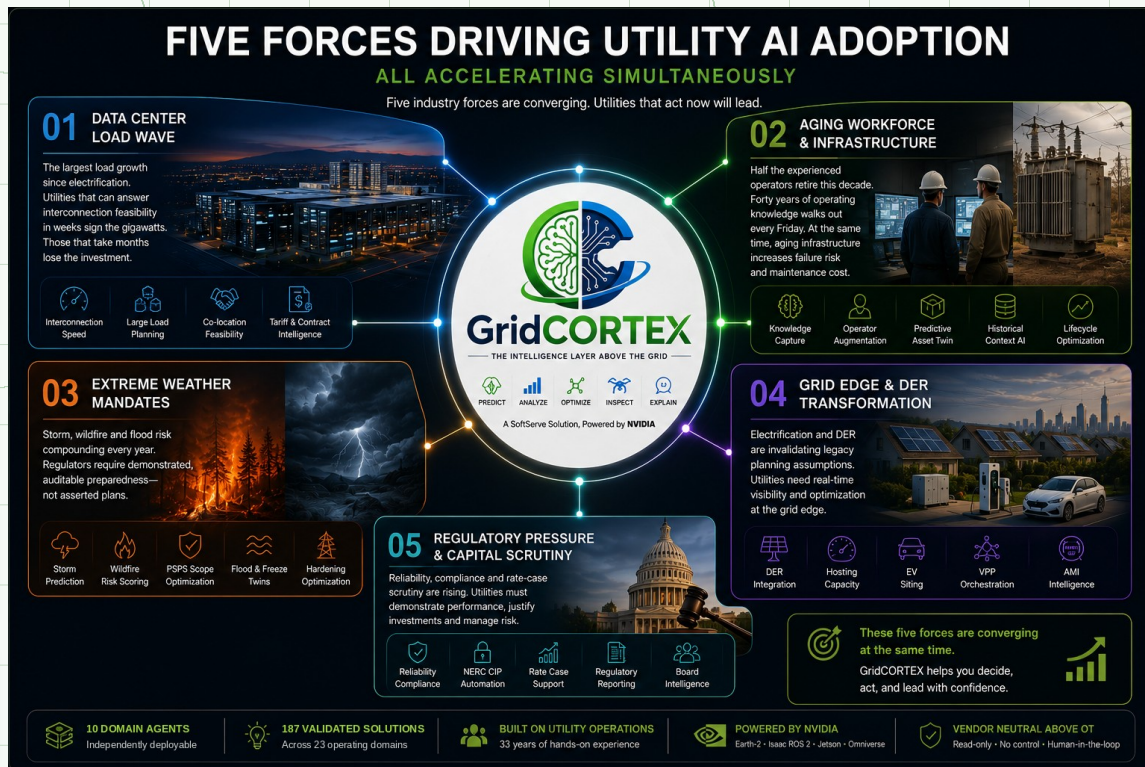
Storm, wildfire and flood risk compound every year. Regulators require demonstrated, auditable preparedness — not asserted plans. The liability of being unprepared now exceeds the cost of being ready.

04 Grid Edge & DER Transformation

Electrification, rooftop solar, EVs and storage are invalidating legacy planning assumptions. Utilities need real-time visibility and optimization at the grid edge — DER integration, hosting capacity, EV siting, and VPP orchestration.

05 Regulatory Pressure & Capital Scrutiny

Reliability, compliance and rate-case scrutiny are rising together. Utilities must demonstrate performance, justify capital, and manage risk with auditable, data-backed evidence.



The Intelligence Layer Above the Grid.

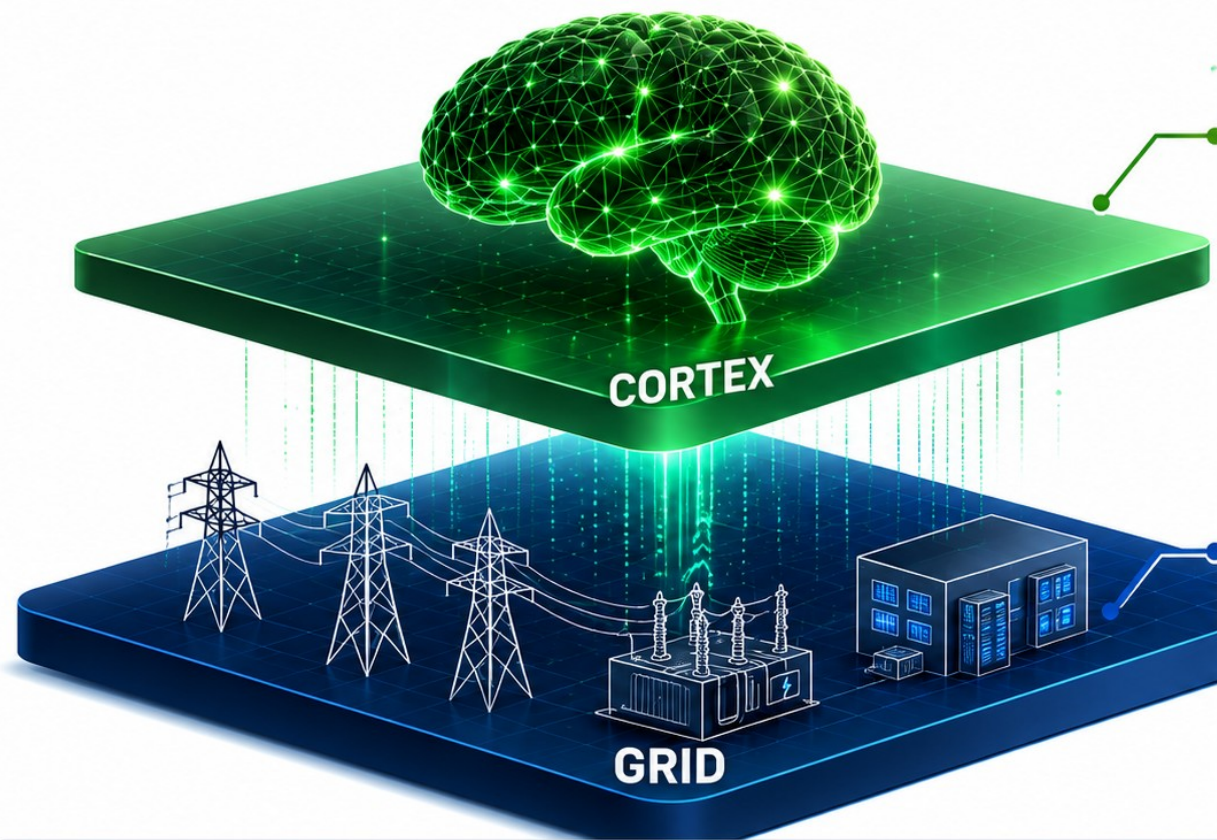
GridCORTEX sits above the systems a utility already owns, answers the questions those systems cannot, and never touches the controls.

WHAT IT IS

- A framework above, not a system among. Read-only into ADMS, EMS, SCADA, OMS, GIS, AMI.
- Ten independently deployable solution domains built on a common intelligence foundation
- Powered by NVIDIA accelerated computing: Earth-2, Isaac, Omniverse, NeMo, cuOpt
- Built and delivered by SoftServe, vendor-neutral above the full OT stack.
- 187 utility-specific solutions, each with a named buyer and measurable outcome

WHAT IT IS NOT

- Not a control system. Zero control pathways, human-in-the-loop for every decision.
- Not an OT replacement. It makes ADMS, EMS, OMS perform better and never competes.
- Not a black box. Every recommendation includes reasoning, sources, and confidence.
- Not a rip-and-replace. Connects read-only, no disruption to existing operations.
- Not a generic AI tool. Built from 33 years of utility operations, not general AI.



CORTEX

INTELLIGENCE LAYER

Thinks. Predicts. Advises.
Never controls.



AI & GenAI



Scenario Modeling



Digital Twins



Natural Language Insights



Optimization



GRID

OPERATIONS LAYER

Does. Controls. Protects.
Always in control.



ADMS / EMS / SCADA



DERMS / Protection Systems



Market / CIS / Historian



Predict the Storm

See what's coming.
Prepare with certainty.



Rank What Matters

Find the assets.
Fix the right ones first.



Model the Future

Load, growth, and grid
scenarios with precision.



Accelerate Outcomes

Faster studies.
Smarter decisions.



Explain Every Answer

Transparent. Traceable.
Trusted by operators.



READ-ONLY CONNECTION
to all systems



NO CONTROL PATHWAYS
ever



HUMAN-IN-THE-LOOP
for every decision

187
USE CASES

23
DOMAINS

10
AGENTS

Four Lead · Three Expansion · Three Specialized



Operations

Control room, field force, switching, restoration, AR/XR



Resilience

Storm, wildfire, PSPS, flood, freeze, vegetation



Asset

Fleet health, transformer DGA, cable failure, spares



Edge

DER, hosting capacity, EV siting, VPP, AMI intelligence



Customer

Chatbot, billing exceptions, NTL detection, rate design



Connect

Data center interconnection, co-location, flexible load



Enterprise

NERC CIP, OT cyber, regulatory filing, board intelligence



Robotics

Drone inspection, substation robot, downed conductor recon



Nuclear

Life extension, outage optimization, SMR siting



ISO/RTO Markets

Queue studies, RA twins, market surveillance

The Gap Layer: Above OT. Below the Enterprise Cloud.

Layer 4 Experience

Control room · Field mobile · Executive · Customer · Robotics dashboard

Layer 3 Domain Agents + Orchestration

10 Solution domains · Guardrails · Human-in-the-loop · Explainability · Confidence scoring

Layer 2 NVIDIA Intelligence Engines

Earth-2 · Isaac ROS 2 · Jetson · Omniverse · NeMo · cuOpt · RAPIDS · Metropolis · Morpheus

Layer 1 Data + Integration Fabric

Streaming SCADA/AMI · Batch records · Imagery/LiDAR · Semantic grid model · Digital twin

Layer 0 Systems of Record (Read-Only)

ADMS · EMS · SCADA · OMS · GIS · EAM · AMI · CIS · ERP. Never replaced, never controlled.

SOLUTION ARCHITECTURE

LAYER 4 EXPERIENCE

Role-fit interfaces — every person sees exactly what their role needs



LAYER 3 GridCORTEX — 10 DOMAIN AGENTS

Each agent deploys independently — shares the data fabric and gets cheaper to activate



LAYER 2 NVIDIA INTELLIGENCE ENGINES

Shared accelerated services — every agent draws from the same stack



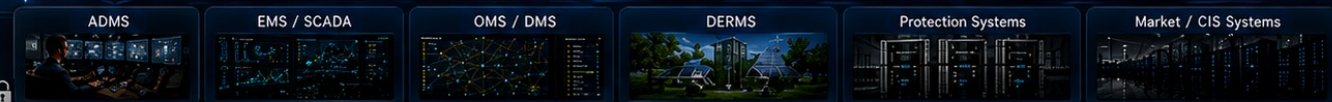
LAYER 1 DATA & INTEGRATION FABRIC

Unified, governed, real-time



LAYER 0 OT SYSTEMS OF RECORD

Connects securely across the layer utilities rely on



READ-ONLY CONNECTION TO ALL SYSTEMS • NO CONTROL PATHWAYS • HUMAN-IN-THE-LOOP FOR EVERY DECISION

EXPLAINABLE
Every recommendation includes reasoning sources & confidence

SECURE
Zero control pathways — read-only by design

MODULAR
Add one agent, benefit from all

VENDOR NEUTRAL
Works with any OT / IT stack

CLOUD & EDGE
Deploy anywhere — cloud, private, edge

NVIDIA SECURITY
Zero Trust Architecture
Data Protection
Model Security
Secure Inference
Audit & Compliance

DATA Governance
Data Quality
Metadata & Lineage
API & Streaming
Data Catalog

HISTORIAN / PI

Built on the Compute Stack the Problems Actually Require.

Earth-2

Weather + climate simulation

Resilience, Connect, Operations

Isaac ROS 2

Autonomous robotics navigation

Robotics

Jetson Orin

On-device edge AI inference

Robotics, Edge, Resilience

Omniverse

Digital twin + visualization

Asset, Robotics

NeMo / NIM

Generative AI + RAG on utility records

All 10 domains

cuOpt

Fleet + schedule optimization

Operations, Resilience

RAPIDS / cuML

Population-scale analytics

Edge, Asset, Customer, Enterprise

Metropolis

Vision AI + inspection

Resilience, Robotics

Morpheus

Cybersecurity detection

Enterprise

Consulting-Led. Engineering-Delivered. Outcome-Proven.

01

Discovery & Solution Design

2–6 Weeks

SoftServe consultants assess your environment against the 187-solution library, leading with Connect, Resilience, Asset, and Operations. Map gaps. Design a scoped engagement with agreed success criteria before engineering begins.

02

Proof of Value Pilot

3–6 Months

One solution. One KPI agreed in writing. Where history allows, replay the proof against events you have already lived through. Success defined before the first line of engineering.

03

Production & Expansion

Ongoing Managed Services

Full deployment with SoftServe engineering and managed services. Every additional domain activates faster because the integration work is already done.

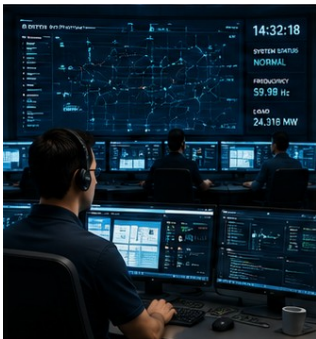
The compound integration advantage: every additional solution domain activates faster because the engineering foundation is already in place.

Five Chairs. One Perspective.

Most grid modernization solutions are built from a single viewpoint. GridCORTEX was built from all five.

01

The Operator



We have lived inside the utility control center. Reliability, restoration, NERC compliance, and the reality of operating a power grid when the lights are on the line.

02

The Technology Provider



We have built, deployed, and supported the industry's most advanced grid operations technology (ADMS, DERMS, OMS) across North America and internationally.

03

The Systems Integrator



We have led utility modernization programs across multiple vendors and platforms. Integration, governance, change management, and enterprise transformation at scale.

04

The Consulting Partner



We have advised utility executives on strategy, business cases, and long-term modernization planning from the executive table.

05

The AI Solutions Leader



Today we apply that collective experience to the next generation of utility intelligence. GridCORTEX starts with operations, not technology. That is the difference.

Five Advantages No Competitor Combines.

01

Practitioner Depth

GridCORTEX was designed by people who have sat in every major role in grid modernization: operator, technology provider, systems integrator, consulting partner, and AI solutions leader. Not one solution was designed from the outside looking in.

02

NVIDIA-Native Engineering

Earth-2, Isaac ROS 2, Jetson Orin, Omniverse, NeMo, cuOpt, RAPIDS, Metropolis, Morpheus. Not adapting general AI to utilities. Building on the compute stack the problems actually require.

03

Vendor Neutrality Above OT

SoftServe sells no ADMS, no EMS, no OT hardware. GridCORTEX is genuinely neutral above GE, Schneider, Oracle, or any other vendor. Nothing below OT to protect.

04

Nuclear Domain

Domain 19: life extension economics, component analytics, outage optimization, SMR siting, and nuclear-data center co-location. No competitor has built this. Domain 20 extends the same edge to the seven ISOs/RTOs.

05

187 Use Cases

Every use case has a named buyer, budget line, NVIDIA stack mapping, pilot design, and executive pitch. Not a vision. A 187-solution working library built from 33 years of grid operations.

Six Solutions: Led by the Four Lead Domains.

UC 1.4 · Operations

Pre-Event Storm Preparation

Physics-informed storm modeling, crew pre-positioning, and feeder risk scoring 48-72 hours before the event. Reduces storm SAIDI.

UC 12.1 · Connect

Data Center Interconnection Engine

Completes large load interconnection feasibility in days not months. Utilities that answer fast sign the gigawatts.

UC 4.1 · Asset

Predictive Asset Health Twin

Fleet-wide asset scoring identifies failures before they happen. Defer one transformer replacement per year and the program funds itself.

UC 16.1 · Robotics

Autonomous Drone Inspection

NVIDIA Isaac-powered drone fleet replaces helicopter inspection. AI detects conductor damage, insulator failures, vegetation risk.

UC 2.1 · Enterprise

NERC CIP Compliance Automation

Automates evidence collection and audit response documentation. Reduces CIP preparation time. Improves compliance posture.

UC 7.6 · Customer

Revenue Protection & NTL Detection

Identifies energy theft and non-technical loss from AMI data. Prioritizes field investigation by expected revenue recovery.



GridCORTEX

The intelligence layer above the grid.

Three ways to start:

1

Discovery Engagement

Map your environment against 187 validated solutions. Scoped KPI agreed before engineering begins.

2

Proof of Value Pilot

One domain, one KPI, replay proof against your own operational history.

3

NVIDIA Co-Sell Briefing

Align GridCORTEX to your NVIDIA technology priorities for utility accounts.



GridCORTEX

The intelligence layer above the grid.

Four things we need from this room:

1

Name GridCORTEX

Make GridCORTEX SoftServe's named go-to-market offer in Power and Utilities. One framework. One voice. Every AE carries it.

2

Protect the Investment

Fund the demo environment, go-to-market materials, and two lighthouse pilots as product investment, not billable scope. One storm co-simulation pilot with a major IOU. One robotics POC. Those two references change every conversation that follows.

3

Activate the NVIDIA Co-Sell

Formalize the NVIDIA co-sell motion. Get GridCORTEX on NVIDIA's reference architecture for energy. This is the partnership that sets us apart from every other SI in the market.

4

Resolve Noedra and Activate the Sales Playbook

Confirm SoftServe's role and IP boundaries in the Siemens Energy Grid AI Lab before GridCORTEX is positioned at OUC or Duke Energy — then execute the GTM sales playbook (Doc 08/09).